

US Army Corps  
Of Engineers  
Wilmington District

# PUBLIC NOTICE

Issue Date: 20 July 2006  
Comment Deadline: 18 August 2006  
Corps Action ID #: 2006-32978-360

All interested parties are hereby advised that the Wilmington District, Corps of Engineers (Corps) has received an application for work within jurisdictional waters of the United States. Specific plans and location information are described below and shown on the attached plans. This Public Notice and all attached plans are also available on the Wilmington District Web Site at [www.saw.usace.army.mil/wetlands](http://www.saw.usace.army.mil/wetlands)

**Applicant:** Charlotte Storm Water Services  
Attn: Isaac Hinson  
600 East Fourth Street  
Charlotte, North Carolina 28202

**AGENT (if applicable):** Carolina Wetland Services  
Attn: Gregg Antemann  
550 E. Westinghouse Blvd.  
Charlotte, NC 28273

## Authority

The Corps will evaluate this application and decide whether to issue, conditionally issue, or deny the proposed work pursuant to applicable procedures of Section 404 of the Clean Water Act (33 U.S.C. 1344).

## Location

The Andover Phase III Storm Drainage Improvement Project begins on the north side of Tyng Way and extends southwest across Andover Road to Ferncliff Road, in Charlotte, North Carolina (35.17778°N, 80.80694°W). The site contains stream channels with indicators of ordinary high water marks that are unnamed tributaries to Briar Creek in the Catawba River Basin. The Catawba River ultimately flows to the Atlantic Ocean through the Santee-Cooper River system in South Carolina.

## Existing Site Conditions

The project corridor is largely dominated by residential homes with maintained lawns and narrow, wooded riparian buffers. Dominant tree species included red maple, American sycamore (*Platanus occidentalis*), flowering dogwood (*Cornus florida*), red bud, sweet gum

(*Liquidambar styraciflua*), white oak (*Quercus alba*), and red cedar (*Juniperus virginiana*). Dominant understory vegetation included Chinese privet (*Forestiera spp.*), Japanese honeysuckle (*Lonicera japonica*), common blackberry (*Rubus argutus*), bed straw (*Galium triflorum*), various grasses (*Festuca spp.*), and sedges (*Carex spp.*).

The results of the on-site field investigation indicate that there are two jurisdictional stream channels (Streams A and B) located within the project corridor. Streams A and B are unnamed tributaries to Briar Creek and are within the Catawba River basin (HU# 03050103). Briar Creek is classified as "Class C" by the North Carolina Division of Water Quality (NCDWQ).

Stream A flows east from Tyng Way under Chelmsford Road and Andover Road to Danbury Street. Stream A exhibits a continuous bed and bank and substrate consisting of sand to large cobbles. Stream A contains a perennial flow and average ordinary high water widths of 6-8 feet. Biological sampling within Stream A revealed a to moderate p of caddisflies and a of fish. Stream A has a 35-foot Surface Water Improvement Management (S.W.I.M.) buffer along the entire reach within the project corridor. NCDWQ Stream Classification scores for Stream A ranged from 32.5 to 34.5 out of a possible 71 points and ranged from 36 to 53 out of a possible 100 points on the USACE Stream Quality Assessment Worksheet.

Stream B flows north from a storm drain system under Coventry Road until its confluence with Stream A behind 2435 Danbury Street. Stream B was also determined to be perennial and exhibited a continuous bed and bank and substrate consisting of sand to large cobbles. This stream has persistent flow with an average ordinary high water width of 3 feet. Biological sampling within Stream B revealed a of caddisflies. Perennial Stream B scored 30.5 out of a possible 71 points on the NCDWQ Stream Classification Form and 31 out of a possible 100 points on the USACE Stream Quality Assessment Worksheet.

### **Applicant's Stated Purpose**

The purpose of the projects as stated in the application is to install new pipes and stabilization measures to prevent further property loss and flooding along Streams A and B. Stream A conveys a large volume of water during significant storm events. The drainage system is too small resulting in structural flooding and roadway flooding. Residents adjacent to Stream A have experienced severe flooding issues as a result of the inefficiency and capacity of the channel to carry storm water flow. The culverts at Andover Road, Chelmsford Road, and Tyng Way are undersized, do not meet City standards, and pose public safety issues. Eight of the houses along this system experience structural flooding.

### **Project Description**

The proposed impacts for this project include pipe placement and bank stabilization activities. Activities proposed include 330 linear feet of pipe placement, 105 linear feet of hard stabilization, and 155 linear feet of soft stabilization. All proposed piping activities will occur within Stream A. Approximately 110 linear feet of pipe will be installed upstream of Chelmsford Road adjacent to 4155 Chelmsford Road to prevent further bank erosion and possible structural damage. An approximate 195-linear foot section of channel will be piped downstream of Chelmsford Road to reduce flood elevations and prevent property loss to 4148 Chelmsford Road. An additional 25

linear feet of pipe will be installed at the outfall of the Andover Road culvert in order for this crossing to meet City design standards.

Approximately 235 linear feet of stabilization activities are proposed for Stream A and include a 40-linear foot rip rap apron downstream of Tyng Way. This rip rap apron will replace approximately 10 linear feet of existing rip rap. A 65-linear foot rip rap apron will also be installed downstream of the new pipe at the Andover Road crossing. Additionally, an approximate 10-linear foot rip rap apron will be installed at the outfall of the Holroyd Court pipe system and 155 linear feet of live stakes and erosion control matting will be installed behind 1500 Coventry Road. Live stakes will be harvested locally using only native shrub species and will be placed on two-foot centers. Stabilization activities for Perennial Stream B include a 25-linear foot rip rap apron at the outfall of the Coventry Road pipe system. This rip rap apron will replace the existing 25 linear feet of rip rap. The linear footage of each rip rap apron is based on the estimated flows out-letting from a 7' x 4' box culvert and were extrapolated from stream discharge curves. Proposed impacts to Streams A and B are summarized in Table 1.

**Table 1. Proposed Impacts to Jurisdictional Waters**

<b>Stream</b>	<b>Activity</b>	<b>Proposed Impacts (Linear Feet)</b>
Perennial Stream A	Pipe placement upstream of Chelmsford Rd.	110 lf
	Pipe placement downstream of Chelmsford Rd.	195 lf
	Pipe placement downstream of Andover Rd.	25 lf
	40-Linear Foot Rip Rap apron downstream of Tyng Way crossing	30 lf (10 lf existing)
	65-Linear Foot Rip Rap apron at Andover Rd. outfall	65 lf
	10-Linear Foot Rip Rap apron at Holroyd Ct. pipe system outfall	10 lf
	Live staking and erosion control matting at 1500 Coventry Rd.	155 lf
Perennial Stream B	25-Linear Foot Rip Rap apron at Coventry Road pipe system outfall	0 lf (25 lf existing)
<b>Impact Totals</b>		<b>Pipe Placement 330 lf Hard Stabilization 105 lf Soft Stabilization 155 lf</b>

The City of Charlotte Storm Water Services (CSWS) is proposing mitigation for 330 linear feet of piping impacts to on-site perennial channels at a 1:1 ratio. Rip rap aprons will only be installed at new pipe outfalls to immediately stabilize the channel. These aprons are necessary to protect the stream from erosion and sedimentation and should provide an overall benefit to the stream. Therefore, CSWS is not proposing to mitigate for the stabilization impacts. CSWS will use stream mitigation units from its Stream and Wetland Mitigation Bank (Umbrella Bank). The City of Charlotte Umbrella Bank provides compensatory mitigation for unavoidable stream and wetland impacts on City of Charlotte and Mecklenburg County public projects. The goal of the Umbrella Bank is to restore, enhance, create and preserve stream and wetland systems and their functions and values to compensate in appropriate circumstances for unavoidable stream and

wetland impacts. The Umbrella Bank currently has 2,200 stream mitigation units available for purchase.

### **Other Required Authorizations**

This notice and all applicable application materials are being forwarded to the appropriate State agencies for review. The Corps will generally not make a final permit decision until the North Carolina Division of Water Quality (NCDWQ) issues, denies, or waives State certification required by Section 401 of the Clean Water Act (PL 92-500). The receipt of the application and this public notice in the NCDWQ Central Office in Raleigh serves as application to the NCDWQ for certification. A waiver will be deemed to occur if the NCDWQ fails to act on this request for certification within sixty days of the date of the receipt of this notice in the NCDWQ Central Office. Additional information regarding the Clean Water Act certification may be reviewed at the NCDWQ Central Office, 401 Oversight and Express Permits Unit, 2321 Crabtree Boulevard, Raleigh, North Carolina 27604-2260. All persons desiring to make comments regarding the application for certification under Section 401 of the Clean Water Act should do so in writing delivered to the North Carolina Division of Water Quality (NCDWQ), 1650 Mail Service Center, Raleigh, North Carolina 27699-1650 Attention: Ms Cyndi Karoly by August 18, 2006.

### **Essential Fish Habitat**

This notice initiates the Essential Fish Habitat (EFH) consultation requirements of the Magnuson-Stevens Fishery Conservation and Management Act. The Corps' initial determination is that the proposed project will not adversely impact EFH or associated fisheries managed by the South Atlantic or Mid Atlantic Fishery Management Councils or the National Marine Fisheries Service.

### **Cultural Resources**

The Corps has consulted the latest published version of the National Register of Historic Places and is not aware that any registered properties, or properties listed as being eligible for inclusion therein are located within the project area or will be affected by the proposed work. Presently, unknown archeological, scientific, prehistoric, or historical data may be located within the project area and/or could be affected by the proposed work.

### **Endangered Species**

The Corps has reviewed the project area, examined all information provided by the applicant and consulted the latest North Carolina Natural Heritage Database. Based on available information, the Corps has determined pursuant to the Endangered Species Act of 1973, that the proposed project will have no effect on federally listed endangered or threatened species or their formally designated critical habitat.

## **Evaluation**

The decision whether to issue a permit will be based on an evaluation of the probable impacts, including cumulative impacts, of the proposed activity on the public interest. That decision will reflect the national concern for both protection and utilization of important resources. The benefit which reasonably may be expected to accrue from the proposal must be balanced against its reasonably foreseeable detriments. All factors which may be relevant to the proposal will be considered including the cumulative effects thereof; among those are conservation, economics, aesthetics, general environmental concerns, wetlands, historic properties, fish and wildlife values, flood hazards, flood plain values (in accordance with Executive Order 11988), land use, navigation, shoreline erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production, mineral needs, considerations of property ownership, and, in general, the needs and welfare of the people. For activities involving the discharge of dredged or fill materials in waters of the United States, the evaluation of the impact of the activity on the public interest will include application of the Environmental Protection Agency's 404(b)(1) guidelines.

## **Commenting Information**

The Corps is soliciting comments from the public; Federal, State and local agencies and officials; Indian Tribes and other interested parties in order to consider and evaluate the impacts of this proposed activity. Any comments received will be considered by the Corps to determine whether to issue, modify, condition or deny a permit for this proposal. To make this decision, comments are used to assess impacts on endangered species, historic properties, water quality, general environmental effects and the other public interest factors listed above. Comments are used in the preparation of an Environmental Assessment (EA) and/or an Environmental Impact Statement (EIS) pursuant to the National Environmental Policy Act (NEPA). Comments are also used to determine the need for a public hearing and to determine the overall public interest of the proposed activity.

Any person may request, in writing, within the comment period specified in this notice, that a public hearing be held to consider the application. Requests for public hearings shall state, with particularity, the reasons for holding a public hearing. Requests for a public hearing shall be granted, unless the District Engineer determines that the issues raised are insubstantial or there is otherwise no valid interest to be served by a hearing.

Written comments pertinent to the proposed work, as outlined above, will be received by the Corps of Engineers, Wilmington District, until 5pm, August 18, 2006. Comments should be submitted to Ms. Amanda Jones, US Army Corps of Engineers, Asheville Regulatory Field Office, 151 Patton Avenue, Room 208, Asheville, North Carolina 28801-5006.



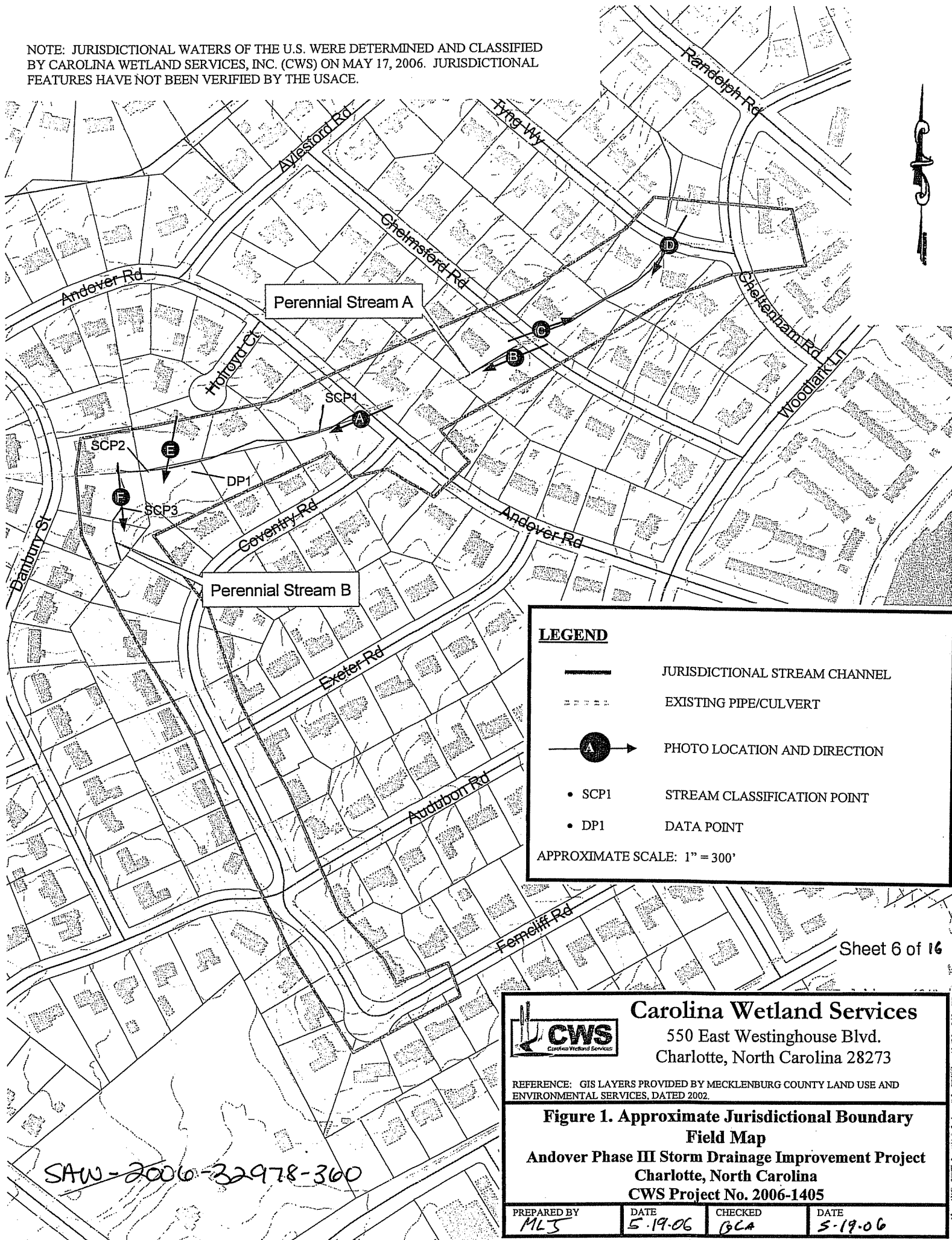
Image Courtesy of the U.S. Geological Survey

7.5 Minute Topographic Map Series, Charlotte East, North Carolina quadrangle, dated 1991.  
Approximate Scale 1" = 2000'

SAW-2006-32978-360



NOTE: JURISDICTIONAL WATERS OF THE U.S. WERE DETERMINED AND CLASSIFIED BY CAROLINA WETLAND SERVICES, INC. (CWS) ON MAY 17, 2006. JURISDICTIONAL FEATURES HAVE NOT BEEN VERIFIED BY THE USACE.



**Carolina Wetland Services**

550 East Westinghouse Blvd.  
Charlotte, North Carolina 28273

REFERENCE: GIS LAYERS PROVIDED BY MECKLENBURG COUNTY LAND USE AND ENVIRONMENTAL SERVICES, DATED 2002.

**Figure 1. Approximate Jurisdictional Boundary  
Field Map**

**Andover Phase III Storm Drainage Improvement Project**  
Charlotte, North Carolina  
CWS Project No. 2006-1405

PREPARED BY  
MLS

DATE  
5-19-06

CHECKED  
BGA

DATE  
5-19-06

SAW-2006-32978-360

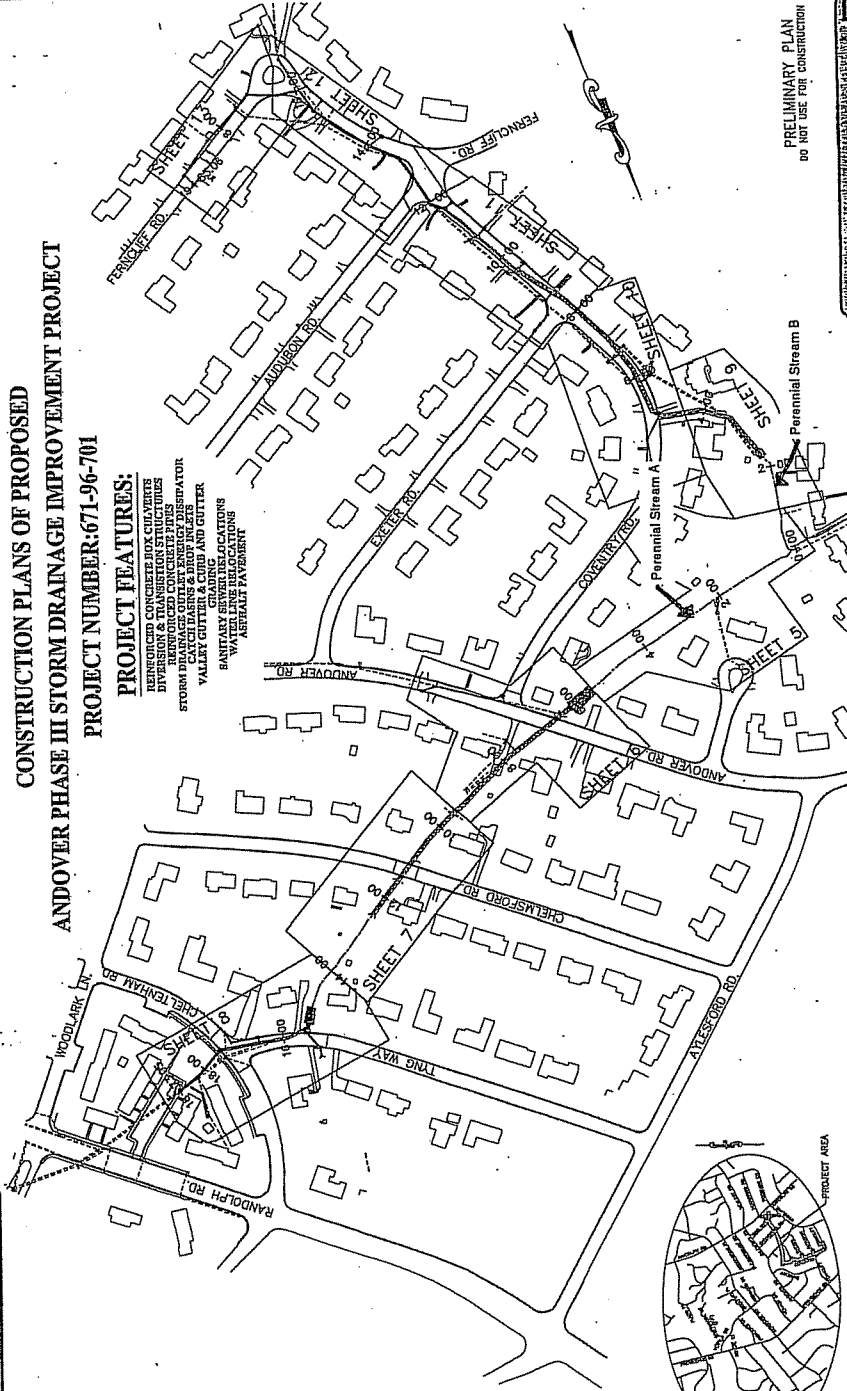


**CHARLOTTE**  
ENGINEERING & PROPERTY  
MANAGEMENT

**CONSTRUCTION PLANS OF PROPOSED  
ANDOVER PHASE III STORM DRAINAGE IMPROVEMENT PROJECT**  
PROJECT NUMBER: 671-96-701

**PROJECT FEATURES:**

- REINFORCED CONCRETE BOX CULVERTS
- DIVERSION & TRANSITION STRUCTURES
- REINFORCED CONCRETE STORM DRAINAGE
- STORM CATCH BASINS & DRAIN INLETS
- VALLEY GUTTERS, GRADING AND GUTTERS
- BANTARY SEWER LOCATIONS
- WATER MAIN LOCATIONS
- ASPHALT PAVEMENT



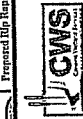
PRELIMINARY PLAN  
DO NOT USE FOR CONSTRUCTION

LOCATION MAP  
NTS

VICINITY MAP  
NTS

Existing Property Lines or ROW lines	_____
Existing Structures	_____
Existing Trunks	_____
Proposed Edge of Pavement	_____
Fence	_____
Slip Slope Line	_____
Temporary Construction Easement	_____
Recorded Temp. Const. Easement	_____
Permanent Drainage Easement	_____
Recorded Permanent Drainage Easement	_____
Cut Wire Easement	_____
Existing Utility and Drilling Easement	_____
Existing Gas Line	_____
Existing Water Line	_____
Existing Sanitary Sewer	_____
Existing Overhead Utility	_____
Existing Underground Telecommunications	_____
Existing Underground Electric	_____
Existing Storm Drainage	_____
Proposed Storm Drainage	_____
Existing Tree	_____
Existing Water Meter	_____
Existing Water Valve	_____
Existing Gas Valve	_____
Existing Sanitary Sewer Manhole	_____
Proposed Sanitary Sewer Manhole	_____
Existing Storm Drain Manhole	_____
Proposed Storm Drain Manhole	_____
Existing Telephone Manhole	_____
Proposed Telephone Manhole	_____
Existing Electric Manhole	_____
Proposed Electric Manhole	_____
Existing Catch Basin	_____
Proposed Catch Basin	_____
Existing Light Pole	_____
Proposed Light Pole	_____
Existing Utility Pole	_____
Proposed Utility Pole	_____
Existing Fire Hydrant	_____
Proposed Fire Hydrant	_____
Existing Yard Inlet	_____
Proposed Yard Inlet	_____
Tree Removal	_____
Accessible Ramp	_____
Tree Protection	_____
Proposed Guardrail	_____
Proposed Curb & Gutter, Curb Drive, Sidewalk	_____
Proposed Asphalt Pavement	_____
Proposed Rip Rap	_____

Sheet 7 of 16

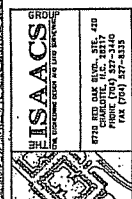


**Carolina Wetland Services**  
550 East Westinghouse Blvd.  
Charlotte, North Carolina 28273

REFERENCE: SITE PLAN PROVIDED BY THE ISAACS GROUP, DATED APRIL 2006.			
<b>Figure 2. Proposed Impacts Overview</b>			
Andover Phase III Storm Drainage Improvement Project			
Charlotte, North Carolina			
CWS Project No. 2006-1405			
PREPARED BY	DATE	CHECKED	DATE
MLJ	5-22-06	GSA	5-23-06



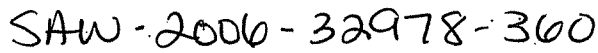
2002 STANDARD SPECIFICATIONS

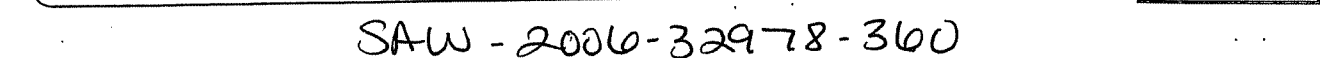


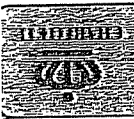
ISAACS  
2715 JEFFERSON AVE., SUITE 200  
FARMINGTON, CT 06030  
PHONE (860) 271-1100  
FAX (860) 271-1101

SAW-2006-32978-360









Plans Prepared By



PER CITY COMMENTS

ANDOVER PHASE III  
STORM DRAINAGE  
IMPROVEMENTS  
PROJECT NUMBER:  
671-96-701

CHECKED BY  
DATE  
SCALE  
SHEET NO.

Sheet 10 of 16



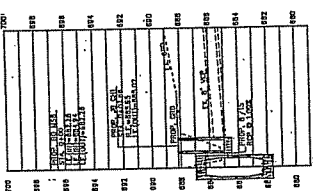
Carolina Wetland Services  
550 East Westinghouse Blvd.  
Charlotte, North Carolina 28273

REFERENCE: SITE PLAN PROVIDED BY THE ISACS GROUP, DATED APRIL 2006.

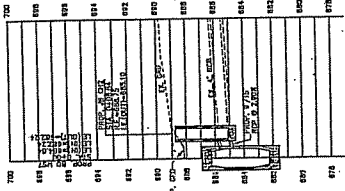
Figure 2 - Sheet 7, Proposed Impacts  
Andover Phase III Storm Drainage Improvement Project  
Charlotte, North Carolina  
CWS Project No. 2006-1405

PREPARED BY  
DATE  
CHECKED  
DATE

PROPOSED STORM DRAINAGE  
SHALL BE USED TO BE CWT

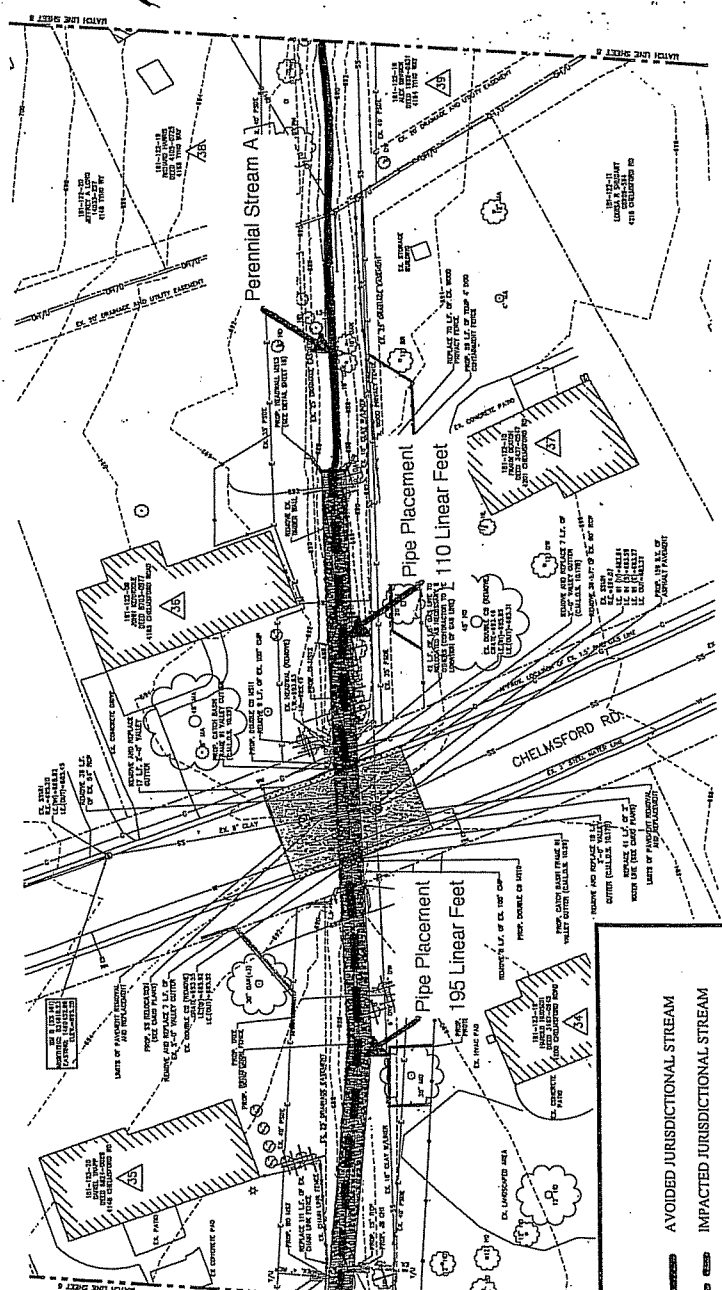
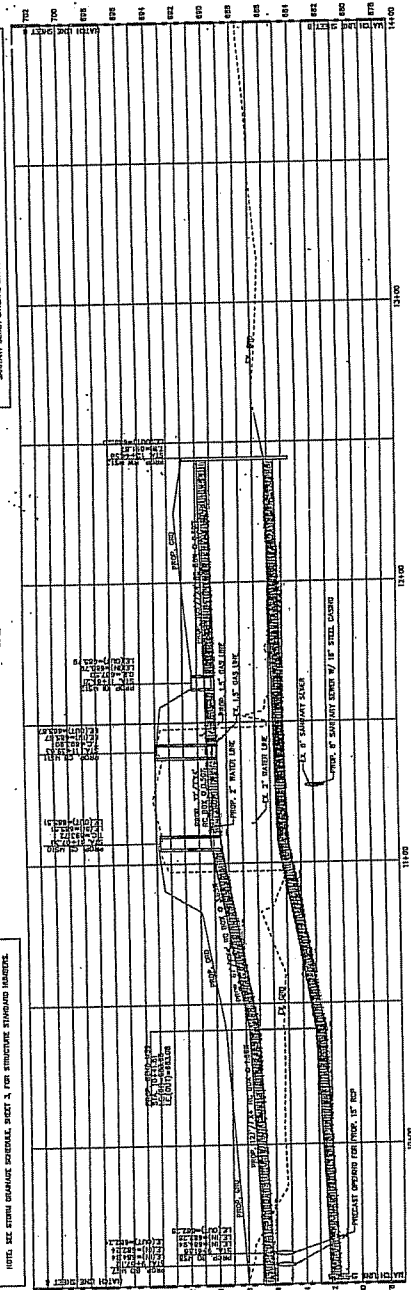


PROPOSED STORM DRAINAGE  
SHALL BE USED TO BE CWT



NOTE: DRAINAGE IMPROVEMENTS ARE REQUIRED TO STORM DRAINAGE PIPES. CONTRACTOR TO COORDINATE  
WITH DISTRICT ENGINEER LATERAL CONNECTIONS. SEE CADD PLAN FOR SANITARY SEWER SYSTEM.

MAIN CHANNEL  
STA 6450 TO STA 14500  
CROSS SECTION



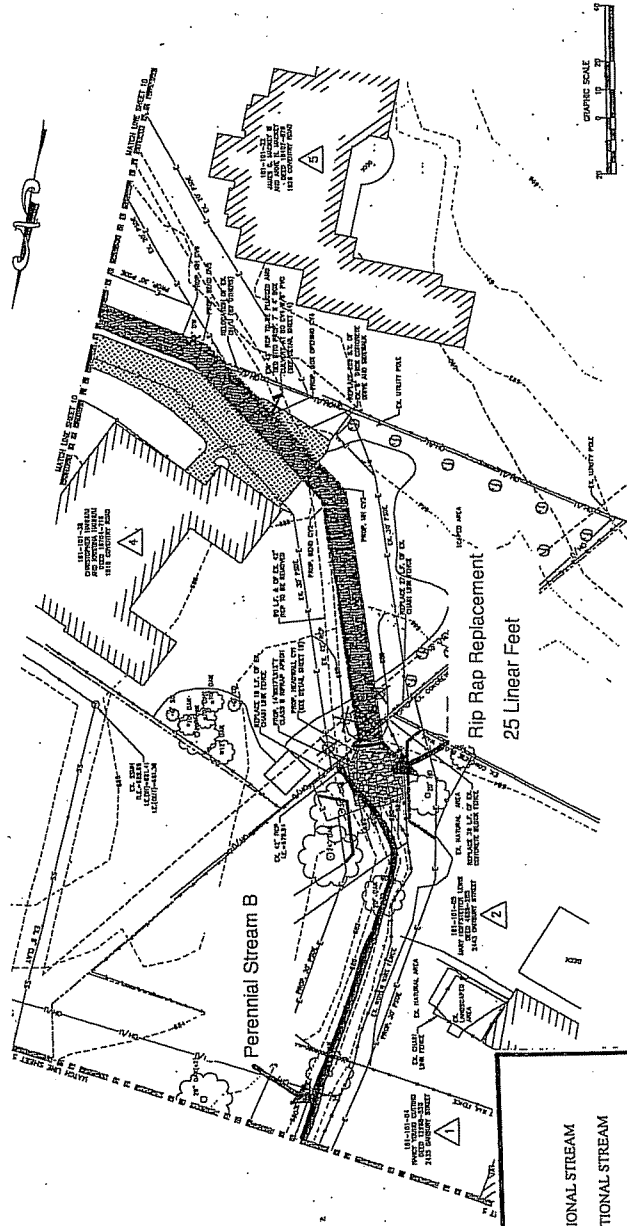
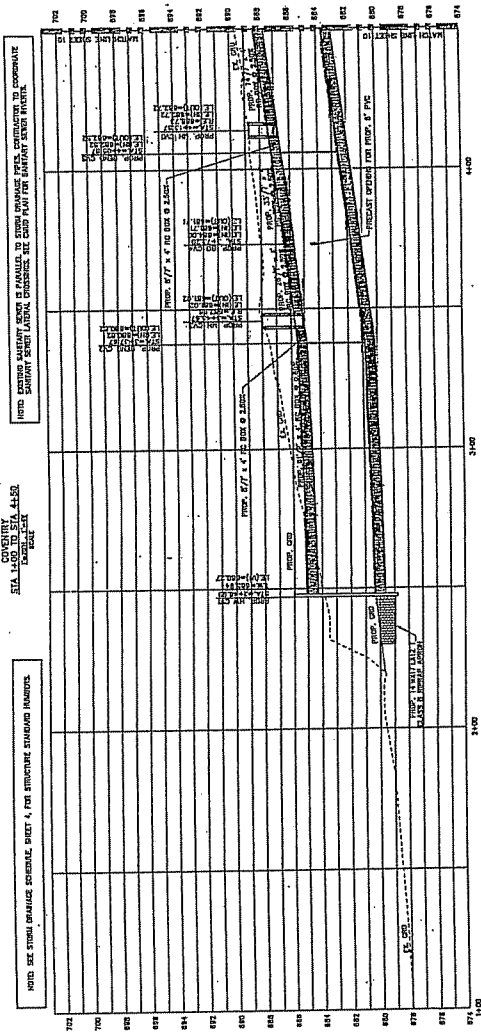
**LEGEND**

- AVOIDED JURISDICTIONAL STREAM
- IMPACTED JURISDICTIONAL STREAM

APPROXIMATE SCALE: 1" = 45'



SAW-2006-32978-360




**LEGEND**

- AVOIDED JURISDICTIONAL STREAM
- IMPACTED JURISDICTIONAL STREAM

APPROXIMATE SCALE: 1" = 45'

PROJECT NUMBER: 671-96-701		DATE: 11/20/05	
STORM DRAINAGE IMPROVEMENTS		CHECKED BY: [Signature]	
ANDOVER PHASE III		SCALE: 1" = 45'	
FOR CITY COMMISSIONERS		DATE: 11/20/05	
FOR CITY COMMISSIONERS		DATE: 11/20/05	

Sheet 12 of 16



**Carolina Wetland Services**  
550 East Westinghouse Blvd.  
Charlotte, North Carolina 28273

**Figure 2 - Sheet 9. Proposed Impacts**  
**Andover Phase III Storm Drainage Improvement Project**  
Charlotte, North Carolina  
CWS Project No. 2006-1405

REFERENCE: SITE PLAN PROVIDED BY THE ISAACS GROUP, DATED APRIL 2005.

PREPARED BY: **MLT**

CHECKED: **MLT**

DATE: **5-21-06**

DATE: **5-21-06**